

NOOKSACK/SAMISH – NOOKSACK PINK

In 1992 two Nooksack basin pink salmon stocks were identified: North Fork/Middle Fork Nooksack pinks and South Fork Nooksack pinks. The two stocks have now been combined into a single stock based on genetic analyses (Shaklee 2001) that showed no compelling evidence for the existence of more than one pink salmon stock in the Nooksack basin.

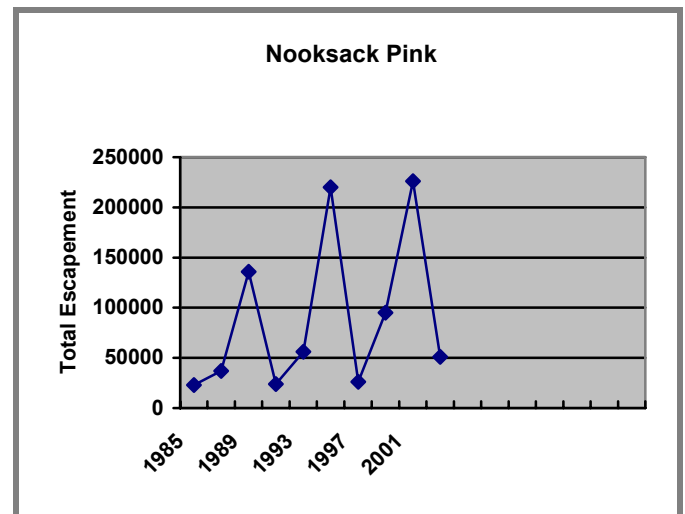
STOCK STATUS

1992 STATUS	2002 STATUS
Unknown	Healthy

STOCK STATUS RATING DATA

USEFULNESS FOR RATING STOCK STATUS: Fair

YEAR	TOTAL ESCAPEMENT
1985	23,000
1987	37,000
1989	136,000
1991	24,000
1993	56,000
1995	220,000
1997	26,000
1999	95,000
2001	226,000
2003	51,000



Data are total escapement estimates for the Nooksack basin based on live spawner counts from index areas in Racehorse, Kendall, Maple, Boulder, Cornell, Hedrick, Gallop, Thompson, Deadhorse and Hutchinson creeks. Live spawner curves for these indices are compared to curves for 1959, 1961, and 1963 when escapements were estimated by mark-and-recapture.

The Nooksack pink salmon stock is rated **Healthy** in 2002. The escapements for this stock increased in the late 1980s, with much higher escapements in 1995 and 2001. The stock experiences substantial biannual variability, characteristic of many other Puget Sound pink stocks. This stock has been severely impacted by habitat degradation, and escapements fluctuate greatly due to environmental instability. Although the status of pinks in the Nooksack basin as a whole has been rated healthy, there are considerable differences in abundance within the basin, with largest abundances in the North Fork and its tributaries.

STOCK DEFINITION

Nooksack pink salmon were identified as a stock based on their distinct spawning distribution, early return timing (beginning in July), small size and their distinct genetic profile. The genetic distinctiveness

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of Nooksack pinks led Shaklee et al. (1995) to place them in a separate genetic diversity unit (GDU) from other north Puget Sound pink stocks. This is an odd-year pink stock.

SPAWNING DISTRIBUTION: Pink salmon spawn in the mainstem Nooksack, the North Fork, Middle Fork and South Fork Nooksack River. Spawning in the North Fork takes place in the mainstem, side channel and sloughs from RM 40 to RM 65 (a natural falls) and in most year-round North Fork tributaries including Deadhorse, Boyd, Glacier, Thompson (to river mile 1.6), Gallup, Cornell, Hedrick, Canyon (to river mile 1.6), Boulder, McDonald, Maple, Kendall Racehorse and Kinney creeks. Spawning in the Middle Fork takes place in the mainstem, side channels and sloughs from RM 0.0 to RM 7.2, (the City of Bellingham's water diversion, an 18-foot high dam), and in several year-round Middle Fork tributaries including Peat Bog (WRIA 01-0352) and Bear (WRIA 01-0353) creeks (local names). Spawning in the South Fork takes place in the mainstem, side channels and sloughs from RM 0.0 to RM 25 (a bedrock gorge) and in several South Fork tributaries including Hutchinson, Skookum, Cavanaugh, Roaring and Deer creeks.

SPAWNING TIMING: Spawning generally occurs from late August through September in odd-numbered years.

GENETIC ANALYSIS: A recent genetic analysis showed no significant differences between pink salmon spawning in the North Fork/Middle Fork Nooksack and the South Fork Nooksack. However, Nooksack pinks are genetically distinct from all other Washington and Canadian pink stocks examined (Shaklee 2001).

STOCK ORIGIN

This is a **native** stock with **wild** production.